PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

P3S2004228		FOR FURTHER ACTION	See Form PCT/IPEA/416						
	ional application No. /JP2005/001299	International filing date (day/month/yea 25.01.2005	Priority date (day/month/year) 20.02.2004						
Internati	ional Patent Classification (IPC) or nati	onal classification and IPC							
F01C13/04 (2006.01) , F01C1/02 (2006.01) , F04B35/00 (2006.01) ,									
FO	F04C18/02 (2006.01) , F04C23/02 (2006.01) , F25B9/00 (2006.01)								
Applicant TOYOTA JIDOSHA KABUSHIKI KAISHA									
1.	1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.								
2.	This REPORT consists of a total of	4 sheets, in	acluding this cover sheet.						
3.	This report is also accompanied by A	NNEXES, comprising:							
	a. (sent to the applicant and	to the International Bureau) a total of	5 sheets, as follows:						
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative								
	Instructions). sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.								
		Bureau only) a total of (indicate type and	wywhou of electronic comicu(s))						
	o (sent to the International I		***						
	, containing a sequence listing and/or tables								
	related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).								
4.	This report contains indications relati	ng to the following items:							
	Box No. I Basis of the report								
	Box No. II Priority								
	Box No. III Non-establi	shment of opinion with regard to novelty	, inventive step and industrial applicability						
	Box No. IV Lack of unity of invention								
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement								
	Box No. VI Certain documents cited								
	Box No. VII Certain defects in the international application								
	Box No. VIII Certain observations on the international application								
Date of submission of the demand		Date of completion	on of this report						
Name a	nd mailing address of the IPEA/JP	Authorized office	Authorized officer						
Facsimi	le No.	Telephone No.	Telephone No.						

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2005/001299

Box	No. I	Basis of the report							
1.		n regard to the language, this report is based on the internation ated under this item.	nal application in the language in	which it was filed, unless otherwise					
		This report is based on translations from the original langua which is the language of a translation furnished for the purp	s report is based on translations from the original language into the following, , , , , , , , , , , , , , , ,						
		international search (Rule 12.3 and 23.1(b))							
		publication of the international application (Rule 12.4)						
		international preliminary examination (Rule 55.2 and	/or 55.3)						
2.	recei		gard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the g Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to						
		the international application as originally filed/furnished							
	$\overline{\boxtimes}$	the description:							
		pages 1-27		as originally filed/furnished					
		pages*							
		pages*							
	\boxtimes	the claims:							
		E 7 1E 01							
		nos. <u>5-7,15,21</u>		as originally filed/furnished					
		nos.*							
			received by this Authority on						
		nos.*	received by this Authority on						
		the drawings:							
		sheets 1–23		as originally filed/furnished					
		sheets*	received by this Authority on						
	_	sheets*	received by this Authority on						
	Ш	a sequence listing and/or any related table(s) – see Supplem	quence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.						
3.	\boxtimes	The amendments have resulted in the cancellation of:	amendments have resulted in the cancellation of:						
		the description, pages							
		the claims, nos. 2-3,9,11-13,16-18,20,22	the claims, nos. 2-3, 9, 11-13, 16-18, 20, 22-23						
		the drawings, sheets/figs	the drawings, sheets/figs						
		the sequence listing (specify):	the sequence listing (specify):						
		any table(s) related to sequence listing (specify):							
4.		This report has been established as if (some of) the amend they have been considered to go beyond the disclosure as fi							
		the description, pages							
		the claims, nos.							
		the drawings, sheets/figs	the drawings, sheets/figs						
		the sequence listing (specify):		_					
		any table(s) related to sequence listing (specify):							
*	If ite	m 4 applies, some or all of those sheets may be marked "sup	erseded."						

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International application No.
PCT/JP2005/001299

Вох	k No. V Reasoned statemen citations and explai					ovelty, inventiv	e step or	industrial applicability;	
1.	Statement								
	Novelty (N)	Claims Claims	1,	4-8,	10,	14-15,	19,	21	YES
	Inventive step (IS)		1,	4-8,	10,	14-15,	19,	21	_ YES
		Claims							_ NO
	Industrial applicability (IA)	Claims Claims				14-15,			YES NO

2. Citations and explanations (Rule 70.7)

None of the documents cited in the international search report sets forth the following features, and said features would not be obvious to a person skilled in the art.

The feature set forth in claim 1, wherein "heat transferred from the aforementioned scroll compressor to the aforementioned spiral partition is radiated to the outside via the aforementioned compressor case".

The feature set forth in claim 8, wherein "the wall surface of the aforementioned expander is left damp".

The feature set forth in claim 10, wherein "the aforementioned spiral partition and the aforementioned compressor case are made from heat-conductive materials, and the aforementioned expander case is made from heat-resistant materials".

The feature set forth in claim 19, wherein "the aforementioned scroll compressor has a compressor case provided to the aforementioned first single side, and the scroll expander has an expander case provided to the

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

aforementioned second single side, and the aforementioned compression operation fluid path has through-holes which are formed in the aforementioned spiral partition, and said through-holes link the inside of the aforementioned compressor case to the inside of the aforementioned expander case".

Therefore, the inventions set forth in claims 1, 8, 10 and 19, and claims 4 to 7, 14, 15 and 21 which refer back to any one of these claims, are novel and involve an inventive step.